

birdsfoot violet (*Viola pedata*), partridgeberry (*Mitchella repens*), Carolina alumroot (*Heuchera caroliniana*), devil's-bit (*Chamaelirium luteum*), sundew (*Drosera rotundifolia*), and the uncommon roundleaf ragwort (*Packera obovata*) and bear grass (*Xerophyllum asphodeloides*). A fairly small population of Bradley's spleenwort (*Asplenium bradleyi*), a rare fern, occurs on one of the outcroppings.

Good quality Chestnut Oak Forest occupy slope areas adjacent to the cliff and on the crest. They have a closed canopy dominated by chestnut oak, with substantial scarlet oak (*Quercus coccinea*), black gum Virginia pine, and sourwood. The subcanopy supports a fairly sparse collection of saplings of the canopy species, as well as sassafras (*Sassafras albidum*) and mockernut hickory (*Carya alba*). Blackjack oak, post oak (*Quercus stellata*), root sprouts of American chestnut (*Castanea dentata*), and hop-hornbeam (*Ostrya virginiana*) are infrequent. Shrubs vary from sparse to dense. Patches of black huckleberry (*Gaylussacia baccata*) and mountain laurel are prominent, though dryland blueberry (*Vaccinium pallidum*), deerberry (*Vaccinium stamineum*), New Jersey tea (*Ceanothus americanus*), and St. John's-wort are also present. Tangles of vines such as common greenbrier (*Smilax rotundifolia*) are fairly common. A sparse herb layer includes galax, kidneyleaf rosinweed, crane-fly orchid (*Tipularia discolor*), teaberry (*Gaultheria repens*), bear grass, partridgeberry, trailing arbutus, greater coreopsis, blazing star (*Liatris* sp.), pipsissewa, flowering spurge (*Euphorbia corollata*), bracken fern (*Pteridium aquilinum*), little heartleaf (*Hexastylis minor*), devil's-bit, downy rattlesnake plantain (*Goodyera pubescens*), downy yellow oakleach, and putty-root (*Aplectrum hyemale*). Small populations of the rare dwarf-flowered heartleaf (*Hexastylis naniflora*) and sweet pinesap (*Monotropsis odorata*) are documented from these forests.

Small examples of good quality Pine--Oak/Heath woodlands are embedded in the Chestnut Oak Forests on the crest. These communities have more open canopies that are dominated by Virginia pine, chestnut oak, and table mountain pine (*Pinus pungens*), with smaller numbers of other hardwoods. The understory is not well developed, but the shrub layer supports dense, shrubby patches of mountain laurel and black huckleberry. Other shrubs and herbs of the surrounding forests are present.

MANAGEMENT AND PROTECTION: The site has no formal protection. Although the cliffs are naturally protected by topography, the forests and rare species above the cliffs are vulnerable to logging. Little active management is needed other than allowing forest communities to attain older growth. Areas at the top of the cliffs that support Pine--Oak/Heath vegetation may benefit from prescribed burning.

NATURAL COMMUNITIES: Chestnut Oak Forest, Piedmont/Coastal Plain Acidic Cliff, Pine--Oak/Heath.

RARE PLANTS: sweet pinesap (*Monotropsis odorata*), dwarf-flowered heartleaf (*Hexastylis naniflora*), Bradley's spleenwort (*Asplenium bradleyi*).